

cell carcinoma of the cervix and infection with HSV type 2.

Numerous drugs including vidarabine (adenine arabinoside), idoxuridine, ribavirin, acyclovir and interferon have been used for the treatment of HSV infections. Although some positive results have been obtained there is a great need for more investigation in the area of antiviral chemotherapy for HSV.

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Current Problems With Parasites

IN RECENT YEARS refugees and immigrants have brought many parasitic infections into the Western United States. People arrive from Asia with liver fluke infection, paragonimiasis and hookworm, as well as falciparum malaria. Drug-resistant strains of malaria occur in Asia and in other parts of the world and are brought into the United States by refugees and by US citizens traveling abroad.

One may find giardiasis, intestinal amebiasis or amebic liver abscess in persons without a history of foreign travel, while other intestinal infections such as ascariasis and trichuriasis are more commonly seen in recent immigrants. Although light infections with *Trichuris* and hookworm are often of little clinical importance, infection with *Taenia solium* is of great concern because it exposes patients and people around them to cysticercosis. In recent years central nervous system cysticercosis has been seen in patients who have acquired the infections locally.

The prevalence of giardiasis and amebiasis is much higher in homosexuals than in heterosexuals. This has now been well documented. Because of frequent reinfection, homosexuals more commonly receive antiparasitic drug therapy. It is important to realize that some of these drugs may be mutagenic and indiscriminate use may pose a real hazard to patients.

Recent reports of the occurrence of *Pneumocystis carinii* pneumonia in homosexuals are also of concern. Cytomegalovirus (CMV) was present in several of these individuals and may have resulted in some degree of impaired immunity. Fatal disseminated parasitic disease often develops in immunosuppressed patients. Most common in these individuals are toxoplasmosis, pneumocystosis and strongyloidiasis. However, amebiasis and

other (inapparent) low-grade infections may also disseminate in patients with an impaired immune system, whether drug-induced, a result of poor nutrition, or concomitant infection.

Careful examination for intestinal parasites before administration of immunosuppressive therapy is essential. Not all clinical laboratories do this adequately. Stool specimens fixed in polyvinyl alcohol (PVA) immediately after passage can be sent to reference laboratories recommended by local public health authorities. The essential permanent stain can be prepared from material fixed in PVA by patients at home or by a ward nurse. State public health laboratories and the Centers for Disease Control, Atlanta, will advise on the availability of serologic tests for parasitic diseases. Certain commercially available kits for serologic testing may yield results of dubious value. Many are now being evaluated for reliability. When in doubt, a physician should check the accuracy of specific tests with the above agencies.

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Therapeutic Drug Monitoring

THE RECOGNIZED medical usefulness of the measurement of drug levels in patients produced a considerably increased demand for such monitoring during the 1970's. This specialty area continues to grow rapidly. Clinicians in both small and large medical centers have come to expect and to depend on laboratory determinations to monitor the course of acute or chronic drug therapy.

Drugs commonly monitored include those used in cardiology (digoxin, quinidine, procainamide hydrochloride and lidocaine hydrochloride), neurology (phenobarbital, phenytoin, primidone, carbamazepine and valproic acid), psychiatry (amitriptyline hydrochloride, nortriptyline hydrochloride and lithium), pulmonary medicine (theophylline), oncology (methotrexate and cisplatin) and infectious diseases (gentamicin and tobramycin). The purpose of a drug assay may be to assure